

## METHODS FOR RENAMING STACK REFERENCES

### IN A COMPUTER PROCESSING SYSTEM

#### ABSTRACT OF THE INVENTION

5           According to one aspect of the invention, there is  
provided a method for renaming memory references to stack  
locations in a computer processing system. The method  
includes the steps of detecting stack references that use  
architecturally defined stack access methods, and replacing  
10   the stack references with references to processor-internal  
registers. The architecturally defined stack access methods  
include memory accesses that use one of a stack pointer, a  
frame pointer, and an argument pointer. Moreover, the  
architecturally defined stack access methods include push,  
15   pop, and other stack manipulation operations.